

NAME: _____

DATE: _____

EQUILIBRIUM AND MOTION

Balanced forces are forces that are the _____ size but in _____ directions. If there are _____ forces on a _____ object, the object will carry on moving at the _____ speed and in the same _____.

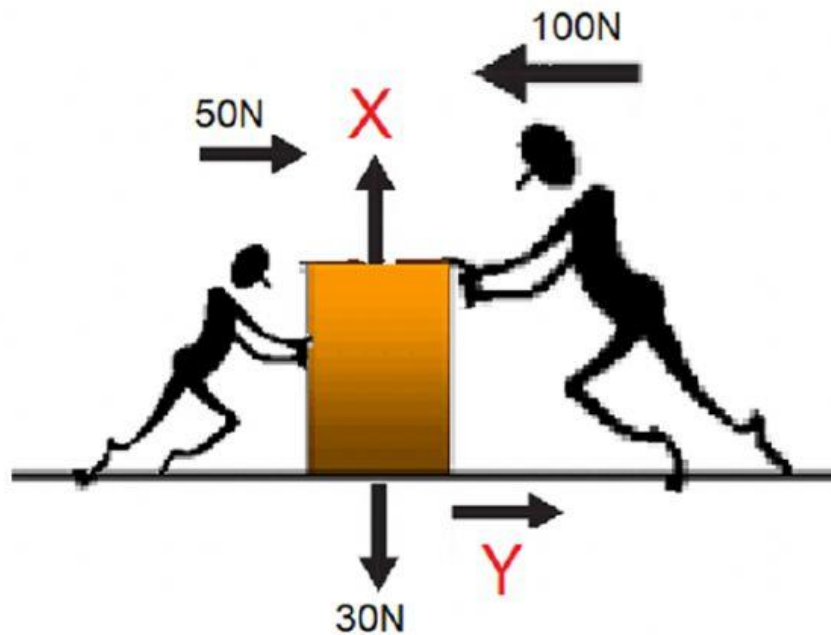
If there are no _____ acting on a moving object, it will _____ to move at the same _____ and in the _____ direction. A moving object _____ need a force to keep it _____. This does not happen very often on _____, because of the forces of _____ and _____.

If _____ forces act on something, it will change the _____ or _____ it is moving in. A _____ in speed is called _____. The acceleration depends on the _____ of the _____ and the _____ of the object.

A _____ force will _____ something faster than a _____ force (for the same _____ object).

A _____ mass will _____ more slowly than a _____ mass (for the same size _____).

Use the picture to answer the following questions.



- a. If all forces are balanced, what is the force of X? _____ N
- b. If all forces are balanced, what is the force of Y? _____ N
- c. What is the weight of the box? _____ N
- d. The force Y is called _____.
- e. If the box moves to the right, the person pushing the box is probably using _____ N of force.